August 2011

NXR4i
Installation and Service Manual

Working towards
a cleaner future

POTTERTON
COMMERCIAL
heating specialists

Declaration of conformity CE

The appliance complies with the standard model described in declaration of compliance CE. It is manufactured and distributed pursuant to the requirements of european directives.

The original of the declaration of compliance is available from the manufacturer.

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1 Introduction

1.1 Symbols and abbreviations

Caution danger
Risk of injury and damage to equipment. Attention must be paid to the warnings on safety of persons and equipment.

Specific information
Information must be kept in mind to maintain comfort.

Reference
Refer to another manual or other pages in this instruction manual.

DHW: Domestic hot water

1.2 General

Congratulations on your choice of a high quality product. We strongly advise you to read the following instructions in order to guarantee the optimal operation of your appliance. We are sure that it will be entirely to your satisfaction and will meet with all of your expectations.

- Keep these instructions in a safe place close to the appliance.
- In the interest of customers, Potterton are continuously endeavouring to make improvements in product quality. All the specifications stated in this document are therefore subject to change without notice.

1.2.1 Manufacturer's liability

- The liability of Potterton as the manufacturer may not be invoked in the following cases:
  - Failure to abide by the instructions on using the appliance,
  - Faulty or insufficient maintenance of the appliance,
  - Failure to abide by the instructions on installing the appliance

1.2.2 Installer's liability

The installer is responsible for the installation and inital start up of the appliance. The installer must respect the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance,
- Carry out installation in compliance with the prevailing legislation and standards,
- Perform the initial start up and carry out any checks necessary

When handing over the installation to the user, the installer will draw the user's particular attention to the following points:

- The safety of the installation,
- The functioning of the installation and the boiler,
- Periodic maintenance to be done.

1.2.3 User's liability

To ensure the optimum operation of your appliance, we strongly recommend that you abide by the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.
- Call on qualified professionals to:
  - Carry out installation in compliance with the prevailing legislation and standards
  - Perform the initial start up
  - Carry out work on the appliance and the installation
  - Have the required checks and services done
- Get your fitter to explain your installation to you.

1.3 Homologations

1.3.1 Certifications

CE identification no: 1312 AQ 952

1.3.2 Directive 97/23/EC

Gas and oil boilers with a maximum operating temperature of 110°C and hot water tanks with a maximum operating pressure of 10 bar pertain to article 3.3 of the directive, and therefore, cannot be CE-marked to certify compliance with the directive 97/23 EC.

The boilers and hot water tanks are designed and manufactured in accordance with the sound engineering practice, as requested in article 3.3 of the directive 97/23/EC, it is certified by compliance with the directives 90/396/EC, 92/42/EC, 2006/95/EC and 2004/108/EC.

2 Safety instructions and recommendations

2.1 Safety instructions

For a proper operating of the boiler, follow carefully the instructions.

Only qualified professionals are authorised to work on the appliance and the installation.

Incorrect use or unauthorised modifications to the installation or the equipment itself invalidate any right to claim.

Before any work, switch off the mains supply to the appliance.

Keep to the polarity shown on the terminals: phase (L), neutral (N) and earth ⏚.

Keep children away from the boiler.

2.1.1 Fire hazard

It is forbidden to store inflammable products and materials in the boiler room or close to the boiler, even temporarily.

If you smell gas, do not use a naked flame, do not smoke, do not operate electrical contacts or switches (doorbell, lights, motor, lift, etc.):

1. Shut off the gas supply.
2. Open the windows.
3. Extinguish all flames.
4. Evacuate the premises.
5. Contact a qualified professional.
6. Inform the gas supplier.

2.1.2 Risk of intoxication

Do not obstruct the air inlets in the room (even partially).

If you smell flue gases:

1. Switch the appliance off.
2. Open the windows.
3. Evacuate the premises.
4. Contact a qualified professional.

2.1.3 Risk of being burnt

Depending on the settings of the appliance:

- The temperature of the flue gas conduits may exceed 60°C.
- The temperature of the radiators may reach 95°C.
- The temperature of the domestic hot water may reach 65°C.

2.1.4 Risk of damage

Do not stock chloride or fluoride compounds close to the appliance.

Install the appliance in frost-free premises.

Do not neglect to service the appliance: Contact a qualified professional or take out a maintenance contract for the annual servicing of the appliance.

2.2 Recommendations

- Check regularly that the installation contains water and is pressurised.
- Keep the appliance accessible at all times.
- Avoid draining the installation.
- The appliance should be on Summer or Antrifreeze mode rather than switched off to guarantee the following functions:
  - Anti blocking of pumps
  - Frost protection
  - Protection against corrosion on domestic hot water tanks fitted with a titanium anode.

3 Technical description

3.1 General description

The boilers of the NXR4i range are pressurised hot water boilers designed for connecting to a flue pipe which require a separate automatic fuel-oil or gas burner. NXR4i boilers have the following characteristics:

- Heating body in cast iron,
- KSF ISR or KSF CE control panel
- Production of domestic hot water can be ensured by a separate hot water calorifier.

3.2 Technical specifications

Conditions of use:

Maximum operating temperature: 100 °C

Maximum operating pressure: 6 bar

Thermostat adjustable from 30 to 90°C

Safety thermostat: 110 °C

Test conditions:

CO_2 Fuel oil = 13%

CO_2 Natural gas = 9.5%

Ambient temperature: 20 °C

Boiler			NXR4i-8	NXR4i-9	NXR4i-10	NXR4i-11	NXR4i-12	NXR4i-13	NXR4i-14
Useful output		kW	300-357	357-419	419-481	481-543	543-605	605-667	667-729
Power input		kW	329-394	392-462	460-530	526-597	595-666	659-731	727-798
Number of sections			8	9	10	11	12	13	14
Water content		l	366	409	452	495	538	581	624
Water resistance (1)	Δ T = 10K	mbar (B)	25	42	63	83	106	135	169
	Δ T = 15K	mbar (B)	11	18	28	37	47	60	75
	Δ T = 20K	mbar (B)	6	10	16	21	26	34	42
Pressure in the furnace for nozzle pressure = 0 (1)		mbar (B)	0.92	1.30	1.59	2.05	2.04	2.15	3.06
Flue gas temperature - Ambient temperature (1) (3)		K	<190	<190	<190	<190	<190	<190	<190
Mass flue gas flow rate (1) (2)	Fuel oil	Kg/h	600	710	810	910	1020	1120	1220
	Gas	Kg/h	630	740	850	960	1070	1170	1280
Combustion chamber	Diameter, combustion chamber	mm	530	530	530	530	530	530	530
	Width, combustion chamber	mm	638	638	638	638	638	638	638
	Depth, combustion chamber	mm	1183	1343	1503	1663	1823	1983	2143
	Volume	m^3	0.310	0.354	0.396	0.439	0.481	0.523	0.565
Stand-by losses (3)	Δ T = 50K	W	315	358	413	451	494	505	555
Net weight		kg	1802	2072	2238	2454	2638	2880	3057

In order for the boiler to operate correctly, it is imperative to respect the draught at the nozzle: 0 at the nozzle.

(1) Nominal operation (top boiler power)

(2) CO_2: 13% on fuel oil and 9.5% on natural gas

(3) Ambient temperature: 20°C

4 Installation

4.1 Regulations governing installation

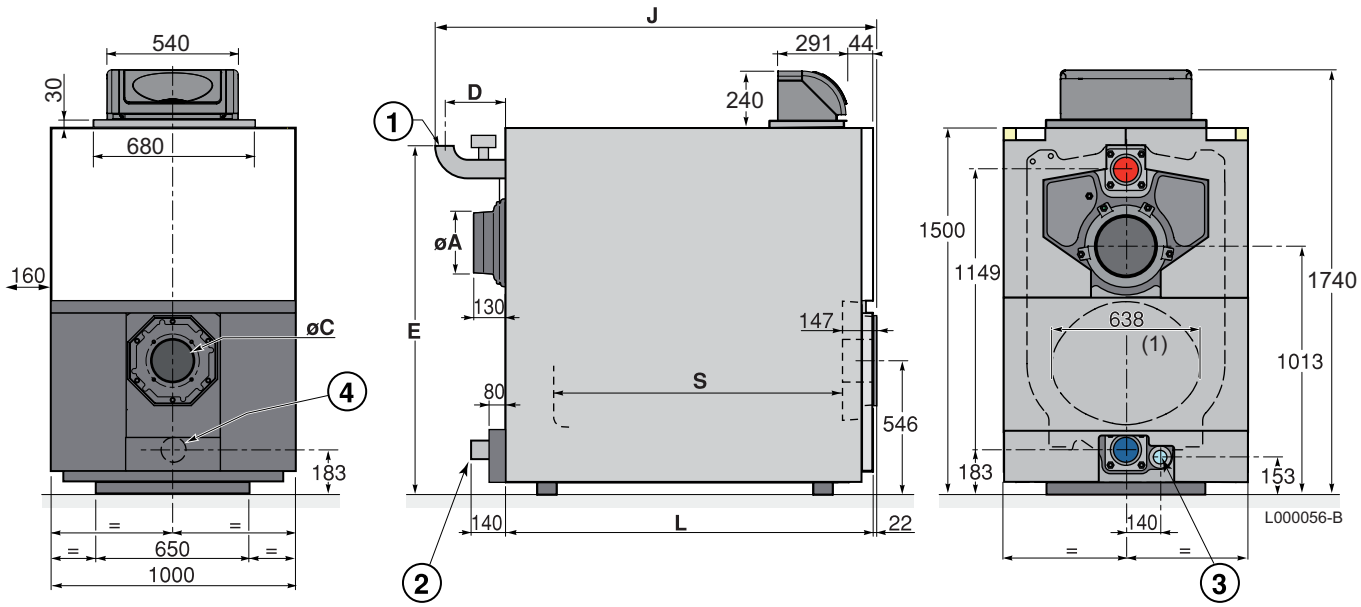
Installation must be carried out in accordance with the prevailing regulations, the codes of practice and the recommendations in these instructions.

4.2 Package list

See assembly instructions.

4.3 Choice of the location

4.3.1 Main dimensions



(1) Inscribed diameter (in mm):

- Front section: 455
- Intermediate section: 530

Equivalent diameter (in mm): 573

Mk Tapped connection
① Heating flow - weld
② Heating return - weld
③ Rp 2" draining outlet
④ Sludge removal hole Rp 2" 1/2 - plugged

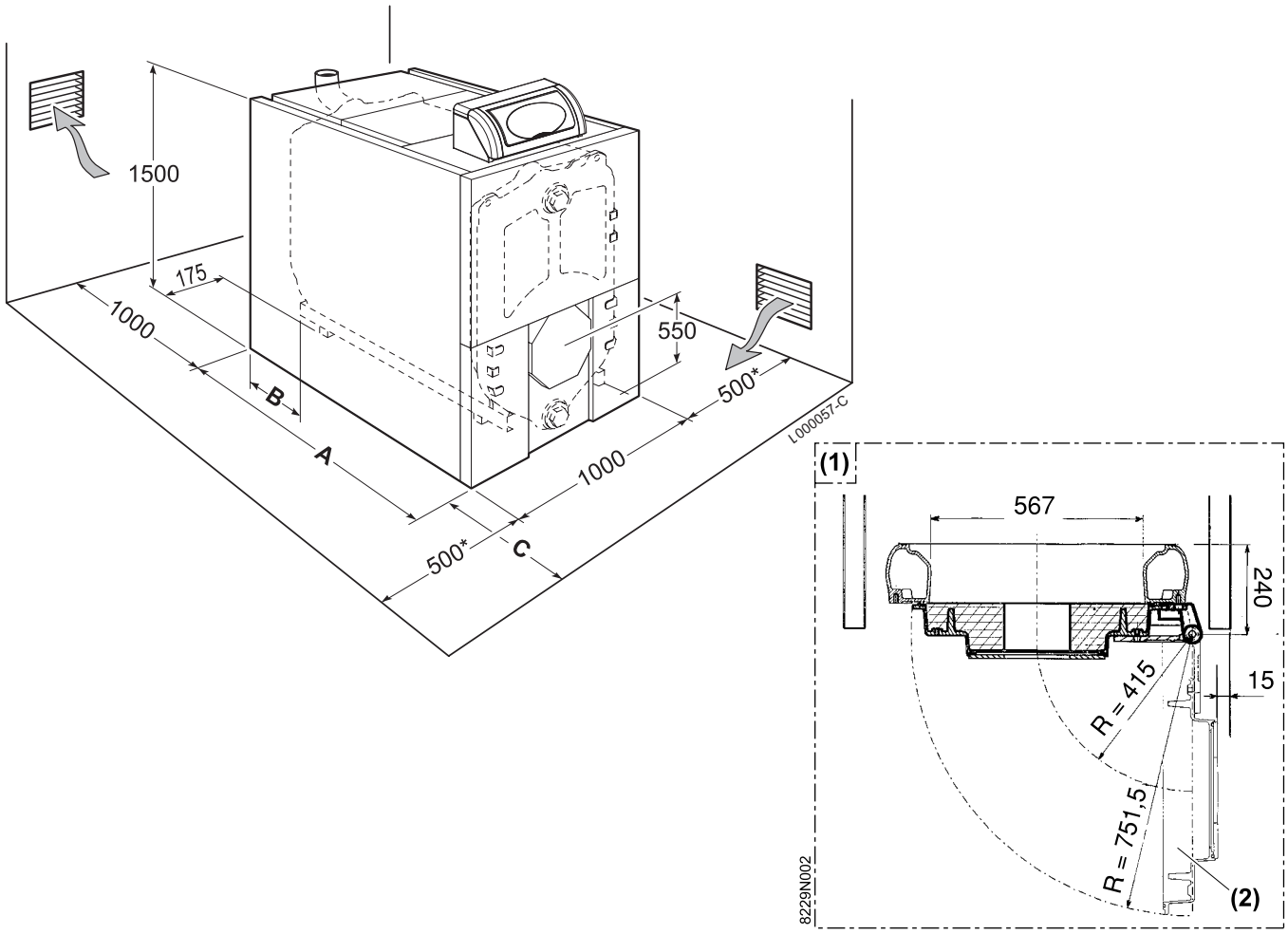
Boiler type	NXR4i-8	NXR4i-9	NXR4i-10	NXR4i-11	NXR4i-12	NXR4i-13	NXR4i-14
ø A (exterior)	250	250	250	300	300	300	300
ø ①②	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"
ø C	Intact or pre-drilled plate (available in spare parts list)						
D	235	235	235	254	254	254	254
E	1427	1427	1427	1447	1447	1447	1447
J	1800	1950	2120	2305	2465	2625	2785
L	1505	1665	1825	1985	2145	2305	2465
S	1183	1343	1503	1663	1823	1983	2143

4.3.2 Position of the boiler

For the assembly and because of their design, NXR4i boilers require no special base. Their closed furnace system means that the floor need not have refractory properties. All you have to ensure is that the floor can support the weight of the boiler when it is fitted for operation.

If the boiler location is not determined precisely, leave enough space around the boiler to facilitate monitoring and maintenance operations.

The dimensions (in mm) correspond to the minimum recommended dimensions needed to ensure adequate accessibility around the boiler.



(1) Top view

(2) Burner door

		NXR4i-8	NXR4i-9	NXR4i-10	NXR4i-11	NXR4i-12	NXR4i-13	NXR4i-14
A	mm	1505	1665	1825	1985	2145	2305	2465
B	mm	130	-40	120	-40	120	-40	120
C	mm	1500	2000	2000	2000	2500	2500	2500

*** Pay attention to the overall volume of the burner when the door is open. To install several boilers in cascade, these dimensions should be adapted accordingly.**

4.3.3 Ventilation

To allow the input of combustive air, sufficient ventilation must be provided in the boiler room, for which the cross section and emplacement must satisfy regulations in force in the country in which the boiler is installed.

Position the air inlets in relation to the high ventilation vents in order that the air is refreshed throughout the boiler room.

Do not obstruct the air inlets in the room (even partially).

In order to avoid damage to the boiler, it is necessary to prevent the contamination of combustion air by chlorine and/or fluoride compounds, which are particularly corrosive.

These compounds are present, for example, in aerosol sprays, paints, solvents, cleaning products, washing products, detergents, glues, snow clearing salts, etc.

Therefore:

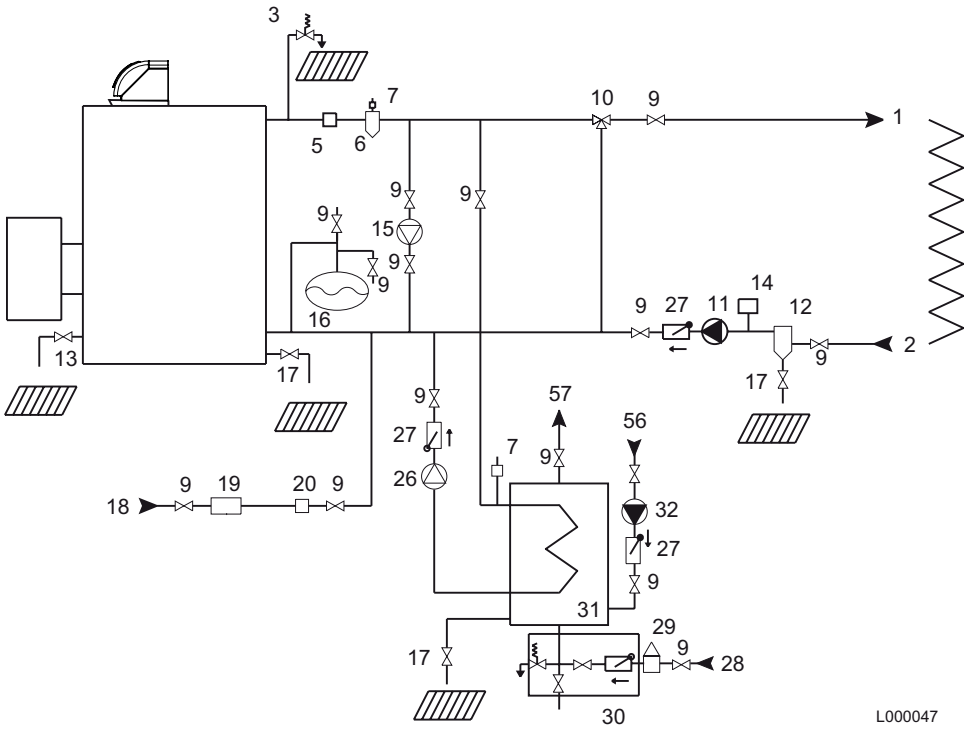
- Do not pull in air evacuated from premises using such products: hairdressing salons, dry cleaners, industrial premises (solvents), premises containing refrigeration systems (risk of refrigerant leakage), etc.
- Do not stock such products close to the boilers.

If the boiler and/or peripheral equipment are corroded by such chloride or fluoride compounds, the contractual guarantee cannot be applied.

4.4 Example of an installation

The example of an installation shown below does not cover every possible configuration. Its sole aim is to draw your attention to the basic rules to be respected.

NXR4i boiler with domestic hot water production using an independent tank.



1 Heating flow
2 Heating return
3 3-bar safety valve + Pressure gauge
5 Flow switch
6 Air separator
7 Automatic air vent
9 Isolating valve
10 3-way mixing valve
11 Boiler pump
12 Sludge decanting pot (particularly recommended on older installations)
13 Flush valve
14 Water low safety pressure-sensitive switch
15 Shunt pump
16 Expansion vessel
17 Drain cock
18 Heating circuit filling (with disconnector depending on prevailing regulations)
19 Water treatment
20 Water meter
26 DHW load pump
27 Non-return valve
28 Domestic cold water inlet
29 Pressure reducer (if mains pressure 5.5 bar)
30 Sealed safety unit calibrated to 7 bar with indicator type discharge
31 Independent domestic hot water tanks
32 Domestic hot water loop pump (optional)
56 Domestic hot water circulation loop return
57 Domestic hot water outlet

4.5 Hydraulic connections

4.5.1 Flushing the system

■ Installing the boiler in new installations (installations less than 6 months old)

- Clean the installation with a universal cleaner to eliminate debris from the appliance (copper, flaxen thread, flux).
- Thoroughly flush the installation until the water runs clear and shows no impurities.

■ Installing the boiler in existing installations

- Remove sludge from the installation.

See: Sludge removal

- Flush the installation.
- Clean the installation with a universal cleaner to eliminate debris from the appliance (copper, flaxen thread, flux).
- Thoroughly flush the installation until the water runs clear and shows no impurities.

4.5.2 Sludge removal

A tapped Rp 2" 1/2 hole with a plug has been provided on the bottom of the front of the boiler.. Fit a 1/4 turn valve (not supplied) on the opening to remove the sludge.

Sludge removal leads to the draining of large quantities of water, so remember to refill the system after the operation.

After this operation, go ahead and fill the installation.

See: Filling the system

i never replace a boiler in an existing system without carefully rinsing the system first. Install a sludge decanting pot on the return pipe, very close to the boiler.

4.5.3 Hydraulic connection of the heating circuit

■ Water flow in the boiler

The water flow in the boiler when the burner is operating must correspond with the following formulae:

- Nominal water flow Qn = 0.86 Pn/20.
- Minimum flow Qmin = 0.86 Pn/45 (this flow also corresponds with the minimum recycle flow in the boiler).
- Maximum water flow Qmax = 0.86 Pn/5.

Qn = flow in m^3/h

Pn = Nominal output (full boiler output) in kW.

i Connect the flow controller to the terminal blocks **UV** in the control panel KSF CE. For the control panel KSF, refer to the instruction manual of the panel.

■ Operation in cascade

After stopping the burner:

- Timeout required before the order to close a 2 way valve: 3 min.
- Switch a possible shunt pump (located between the boiler and a butterfly valve) off via the end of run contact of the butterfly valve.

■ Operation with 2-stage burner

- The water temperature in the boiler is maintained at 50°C or more ; The first stage must be set to a minimum of 30% of the nominal stage.
- Operation at modulated low temperature (minimum outlet temperature: 40°C) ; The first stage must be set to a minimum of 50% of the nominal stage.

Refer to the installation and service manual for the KSF CE control panel.

■ Operation with modulating burner

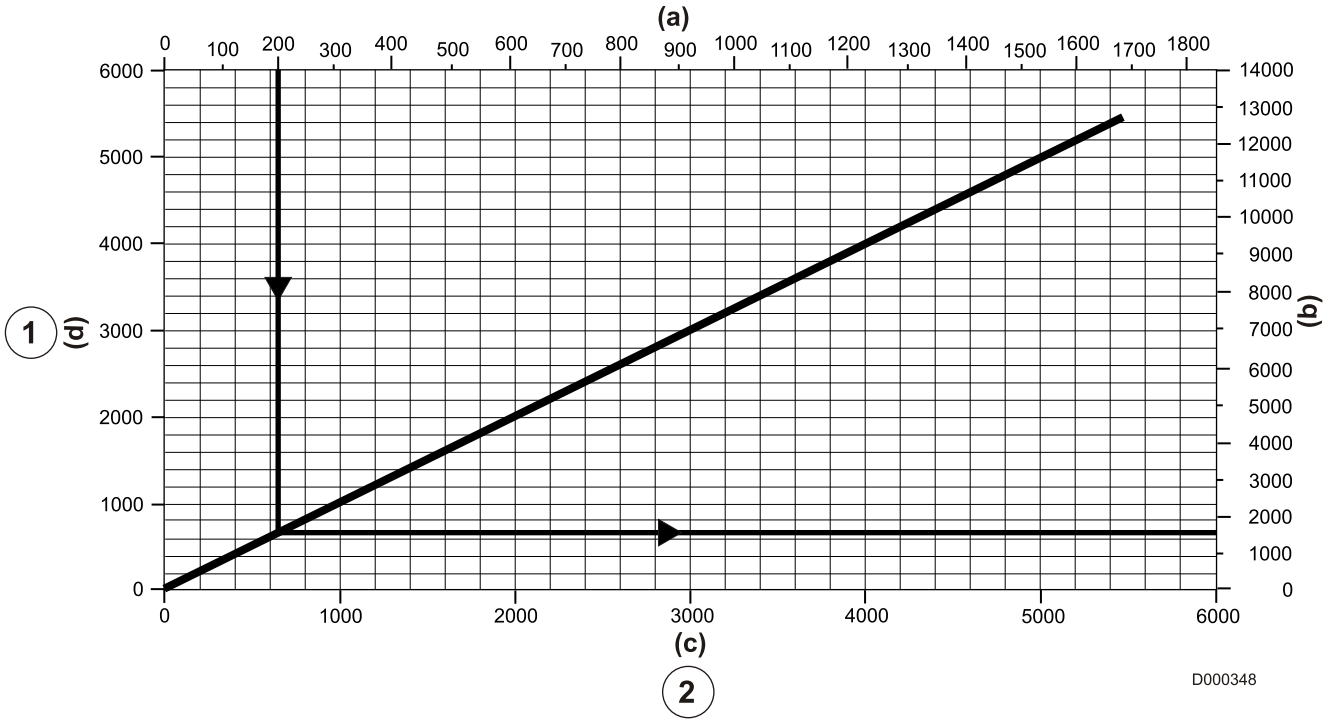
- The water temperature in the boiler is maintained at 50°C or more: The burner can modulate down to 30% of the nominal stage.
- Operation at modulated low temperature (minimum outlet temperature: 40°C) ; The burner can modulate down to 50% of the nominal stage.

Refer to the installation and service manual for the KSF ISR control panel.

4.5.4 Safety valve

The safety valve must be connected to the boiler outlet and no other valve or flap must be interposed between it and the boiler.

■ Minimum safety valve flowrate as a function of maximum boiler nominal output



① Minimum relieving capacity
② Maximum gross boiler output
Unit (a) = kW
(b) = lb/h
(c) = MBtu/h
(d) = Kg/h

Example

Maximum boiler nominal output is 200 kW.

Minimum safety valve flowrate must be 700 kg/h.

4.5.5 Hydraulic connection of the water circuit for domestic use

See: Domestic hot water calorifier instructions

4.6 Chimney connection

The high-performance features of modern boilers and their use in specific conditions as a result of the advance in burner technology (e.g. first-stage or low modulation range operation) lead to very low flue gas temperatures (<160°C).

For this reason:

- Use flue gas pipes designed to enable the flow of condensates which may result from such operating modes in order to prevent damage to the chimney.
- Install a draining tee at the bottom of the chimney.

The use of a draught moderator is recommended as well.

4.6.1 Flue size

Refer to applicable regulations while determining the size of the flue.

Please note that NXR4i boilers have pressurised and tight furnaces and that the pressure at the nozzle must not exceed 0 mbar, unless special sealing precautions have been taken, for instance in order to connect a static condenser/regenerator.

In order for the boiler to operate correctly, it is imperative to respect the draught at the nozzle (= 0).

4.6.2 Connection to the flue gas pipe

The connection shall be removable, and offer minimum load losses, i.e. it must be as short as possible with no sudden change in section.

Its diameter shall always be at least equal to that of the boiler outlet, i.e.:

A: ø 250 mm: for 8 to 10 sections,

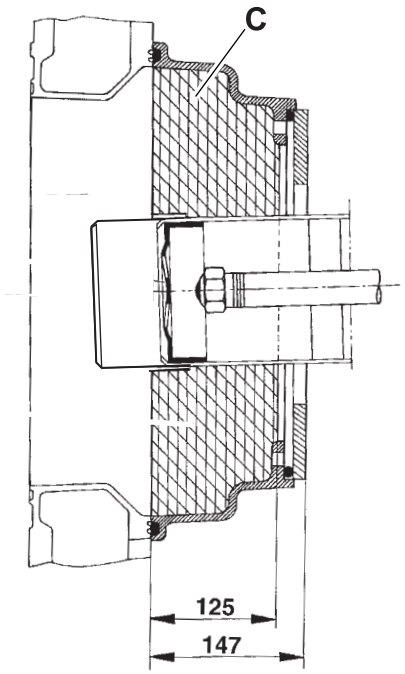
A: ø 300 mm: for 11 to 14 sections.

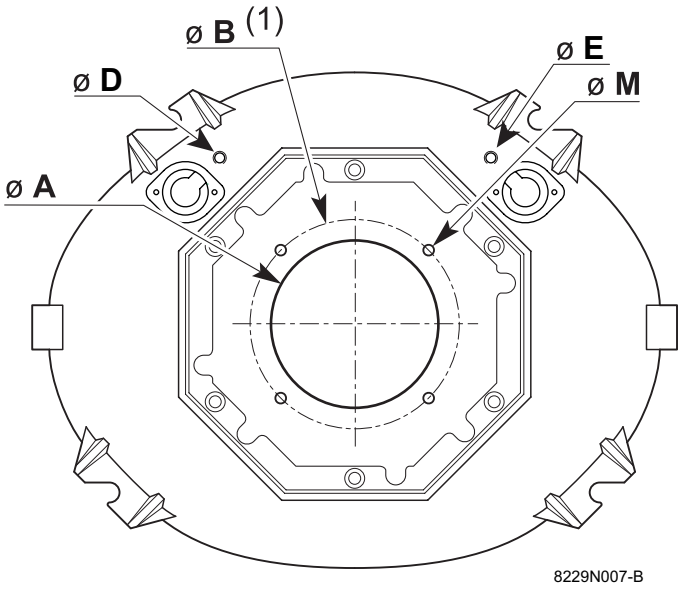
Fit a measuring point (Ø 10 mm hole) on the flue, in order to adjust the burner (combustion check).

4.7 Fuel-oil or gas connections

Refer to the instructions supplied with the burner.

The burner head deflector must be flush with the insulation of the burner door.





C: Furnace door insulation
D, E: Pressure gauge measurement socket

(1) Max attachment diameter:

- Max øB = 290 mm
- Max øB = 330 mm with 4 fastenings at 15° or 45°

Ø A	135	175	190	240	250	290
Ø B	170	200	220	270	325	330
Ø D	10	10	10	10	10	10
Ø E	10	10	10	10	10	10
Ø M	8	8	10	10	14	12

4.8 Electrical connections

Refer to the connection instructions supplied with the control panel..

4.9 Filling the system

Filling shall be performed with a low flow rate from a low point in the boiler room in order to ensure that all the air in the boiler is bled from the high point of the system.

All the pumps must be stopped before filling (included shunt pump(s)).

Do not add cold water suddenly into the boiler when it is hot.

VERY IMPORTANT: Instructions for starting up the boiler for the first time after the system is fully or partly drained: If all the air is not bled naturally to an expansion vessel which opens out onto the air, the system must include manual bleeder valves, in addition to automatic bleeder valves with the capability to bleed the system by themselves when it is operating, the manual bleeder valves are used to bleed all the high points of the system and to make sure that the filled system is free of air before the burner is turned on.

5 Commissioning

See:

- Control panel instructions
- Burner instructions
- Domestic hot water calorifier instructions

6 Switching off the boiler

- Set the On/Off switch to **O**.
- Cut the gas supply to the boiler (if present).

See: Control panel instructions

6.1 Precautions required in the case of long boiler stops (one or more years)

- The boiler and the chimney must be swept carefully.
- Close all the doors of the boiler to prevent air from circulating inside the boiler.
- We advise removing the pipe which connects the boiler to the chimney and to close off the nozzle with a cover.

6.2 Precautions required if the heating is stopped when there is a risk of freezing

We recommend the use of a correctly dosed antifreeze agent to prevent to the heating circuit from freezing.

If this cannot be done, drain the system completely.

7 Checking and maintenance

7.1 System maintenance

7.1.1 Water level

Regularly check the level of water in the system and top up if required, taking care that cold water is not added suddenly into the boiler when it is hot.

The use of an automatic filling is strongly discouraged.

This operation should be required only a few times in each heating season, with very low quantities of water; otherwise, look for the leak and repair it.

7.1.2 Draining

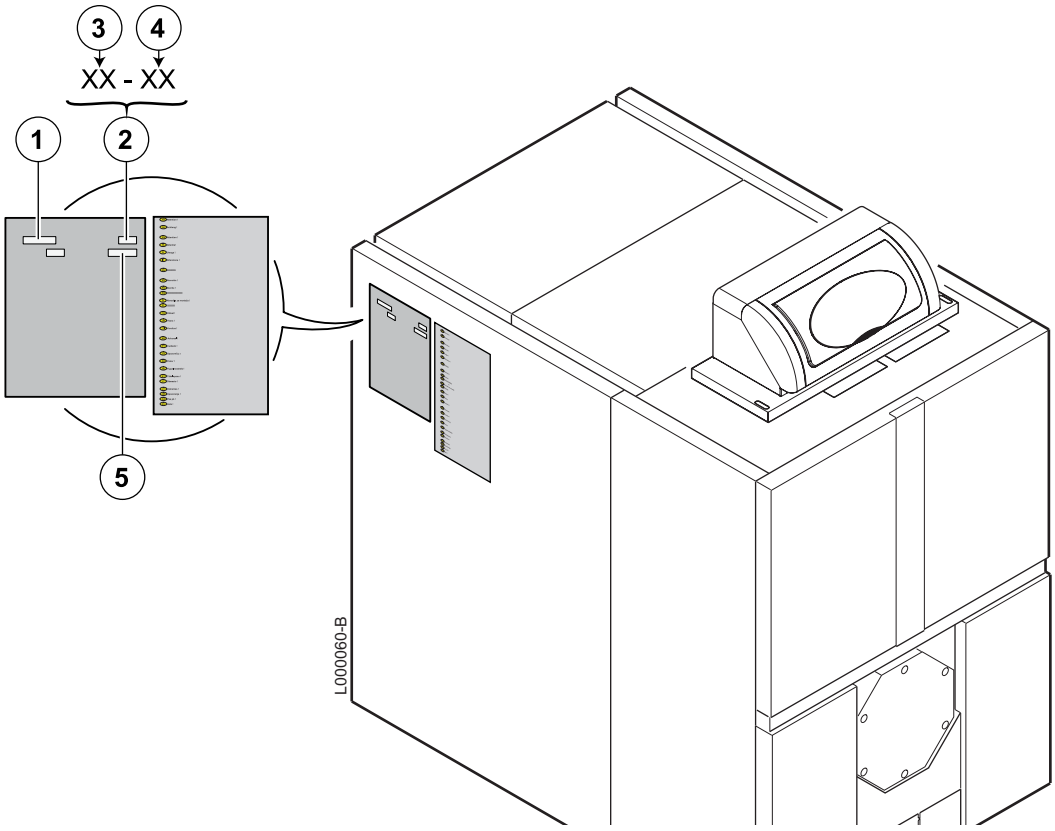
We advise you against draining the system unless it is absolutely necessary.

For example: Several months' absence with the risk of ice in the building.

7.2 Data plate

The rating plate fixed on the side of the boiler during installation is used to identify the boiler correctly and also provides the main specifications of the boiler.

① Boiler type
② Manufacturing date
③ Year of manufacture
④ Week of manufacture
⑤ Serial no. of the appliance



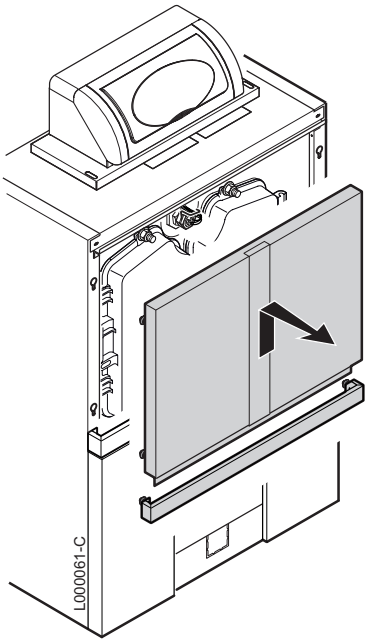
7.3 Maintenance

The boiler will only operate efficiently if the exchange surfaces are kept clean.

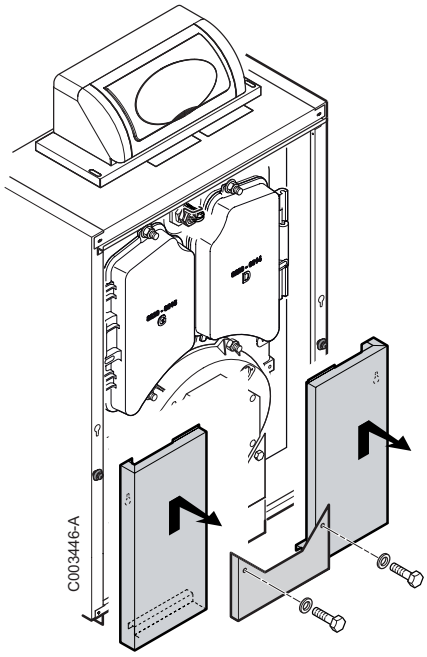
The boiler should be cleaned as soon as required and as the chimney, **at least once a year or more**, depending upon applicable regulations and specific needs.

The operations described below shall only be performed with the boiler and power supply off.

7.3.1 Cleaning the flue gas circuit

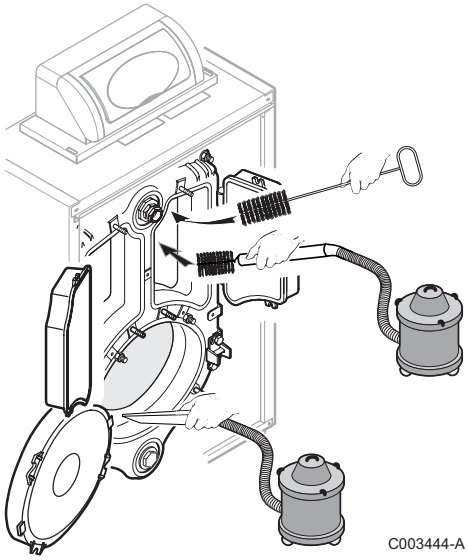


- Remove the upper front panel.
- Take off the lower panels.
- Open the sweeping doors (upper doors) by unscrewing the 3 nuts using a 19 mm spanner.
- Remove the baffle plates from the upper flue ways.



- Carefully sweep the flue ways with the brush supplied for that purpose.
- Brush the baffle plates.
- If possible, use a vacuum cleaner.
- Replace the baffle plates.
- Close the doors.

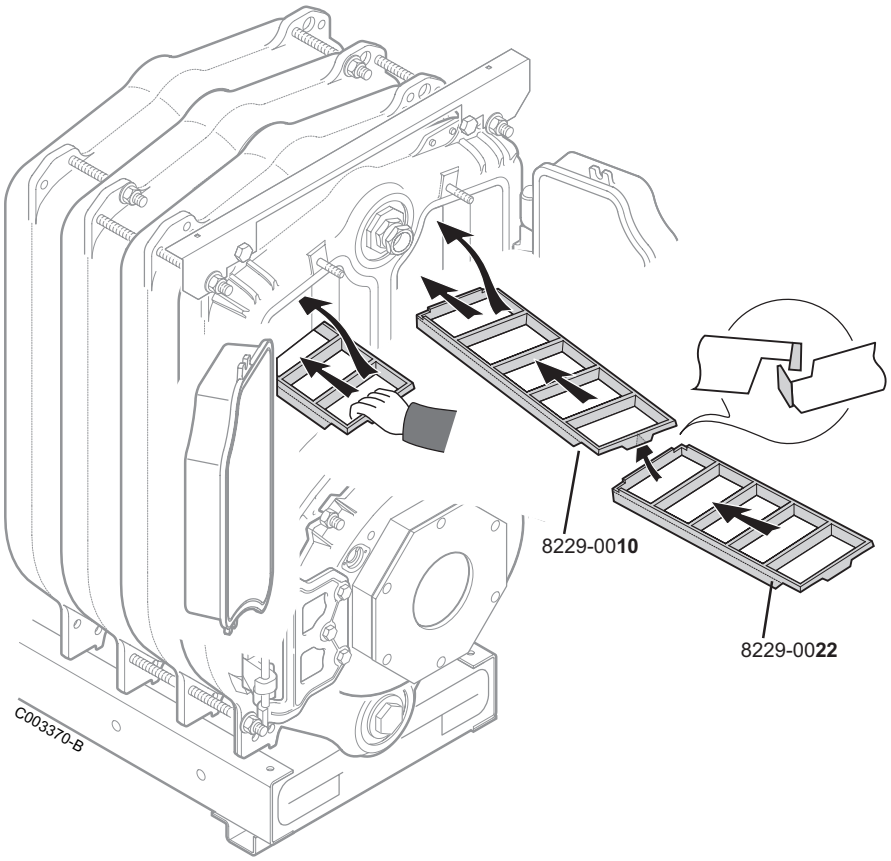
7.3.2 Cleaning the combustion chamber

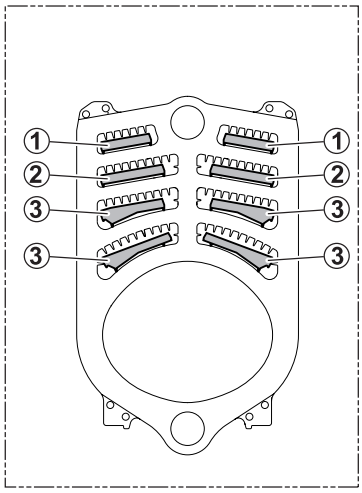


- Unscrew the 4 closing nuts and open the furnace door.
- Brush out the inside of the furnace.
- Use a vacuum cleaner to remove any soot which has accumulated in the combustion chamber.
- Close the door and replace the front panel.

7.3.3 Positioning of the baffle plates

- Put the baffle plates back in place and hook them into each other before engaging them fully in the flue way.
- Close the sweeping doors.

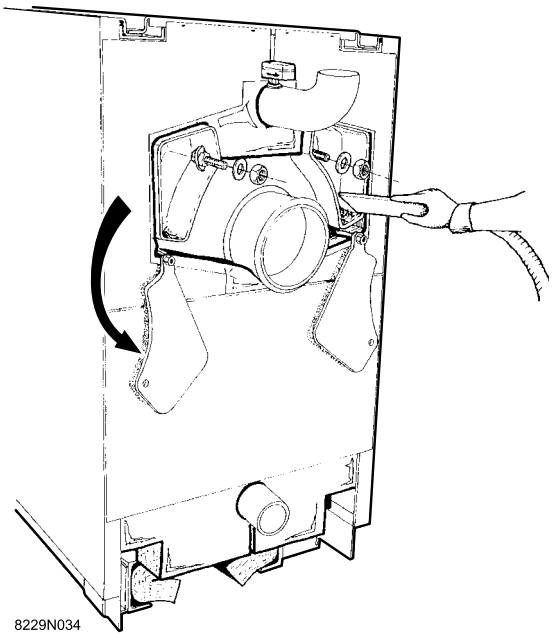




Follow the order of assembly shown in the diagram.
The 8-figure part number of the baffle plate is cast in the metal.

Boiler		NXR4i-8	NXR4i-9 - NXR4i-10	NXR4i-11	NXR4i-12	NXR4i-13 - NXR4i-14
Upper flue ways	①	First 8229-0010 then 8229-0022	2 x 8229-0010	First 2 x 8229-0010 then 1 x 8229-0022	First 2 x 8229-0010 then 1 x 8229-0022	3 x 8229-0010
Central flue ways	②	First 8229-0011 then 8229-0023	2 x 8229-0011	First 2 x 8229-0011 then 1 x 8229-0023	First 2 x 8229-0011 then 1 x 8229-0023	3 x 8229-0011
Lower flue ways	③	First 8229-0012 then 8229-0024	2 x 8229-0012	First 2 x 8229-0012 then 1 x 8229-0024	2 x 8229-0012	2 x 8229-0012

7.3.4 Cleaning the flue gas box



To do so:

- Open the left and right cleaning hatches on the flue gas box (2 nuts H 12 + flat washers with a 19 mm spanner) and remove any soot which has accumulated using a vacuum cleaner.
- Replace the cleaning hatches.

7.3.5 Chemical sweeping

■ General principle

Boilers are traidtionally swept mechanically. There are now chemical sweeping methods which facilitate this maintenance work.

A chemical reagent is applied to the boiler's heating surfaces.

After application, the reaction is completed by igniting the burner. The initial deposits are neutralised and pyrolised. The remaining pulverent residues are easy to remove by sweeping or vacuum cleaning.

■ The products

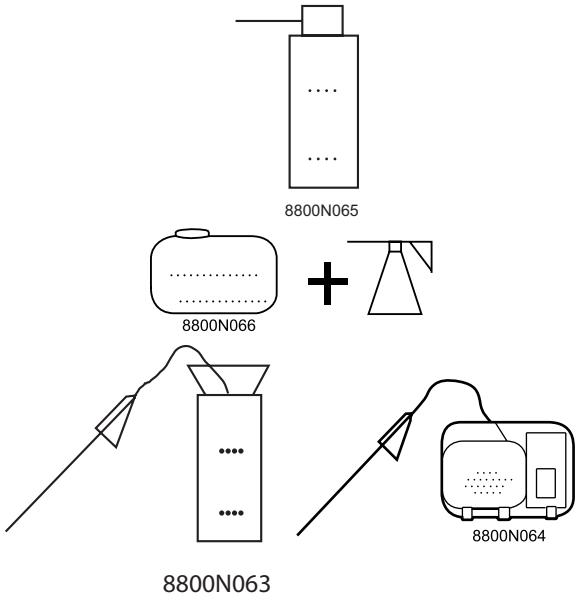
The product must be suitable for boilers with a cast iron body. Various manufacturers offer products in the form of a concentrated liquid or aerosol.

The aerosols are packaged in 0.5 to 1 l spray cans for treating domestic boilers. Refer to the instructions supplied with the product.

The liquid products are available in 1 to 50 l containers. These concentrated liquids are diluted before application with a spray.

Sprays exist in various forms suitable for their intended use:

- Low capacity (2 or 3 l) spray with built-in reservoir for small boilers and moderate frequency. Manual pressurisation of the reservoir.
- 5 l spray with separate reservoir, nozzle and connecting tube. The nozzles enable easy application at the back of the combustion chamber. Manual pressurisation of the reservoir.
- Motor-assisted pressurisation spray with reservoir, nozzle and connecting tube. These sprays are intended for intensive use.



■ Operational mode

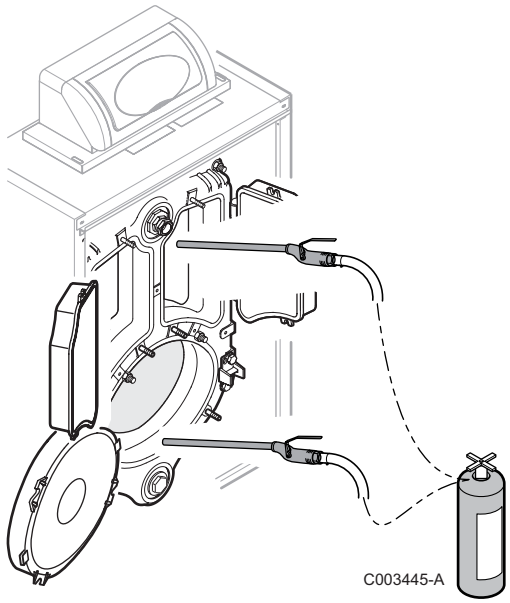
The operating mode mentioned corresponds to standard user situations. Refer to the manufacturer's instructions for specific advice on the product used.

■ Application

- Depending on the product, the boiler must be cold or heated. Refer to the instructions supplied with the product.
- Direct application to the heating surfaces with aerosol sprays.
- The concentrates are diluted in the proportions 1/5 to 1/20 (depending on the product and the condition of the boiler).
- Application with the spray is done in the upper part of the boiler and on the walls of the combustion chamber. Surfaces are dampened but not washed. It is not necesaary to use the spray to get between the heating surfaces.
- A volume of one litre of solution is generally used for 1 m^2 of heating surface (domestic boiler), i.e. 0.05 to 0.2 l of concentrate.

■ Ignition

The burner is ignited after allowing the product time to penetrate for 2 to 5 min. Refer to the instructions supplied with the product.



■ Cleaning

- Remove the baffle plates.
- Light sweeping will remove the pulverent residues remaining after combustion.
  The remaining pulverent residues are easy to remove by sweeping or vacuum cleaning.
  For certain products, brief application after cleaning has a preventive effect, limiting deposits on the heating surfaces.
- Replace the baffle plates.
- Close the door of the combustion chamber.
- Service the burner.
- Replace the front panel.

7.4 Cleaning the casing material

Use a soapy solution and a sponge only. Rinse with clean water and dry with chamois leather or a soft cloth.

7.5 Maintenance of the burner

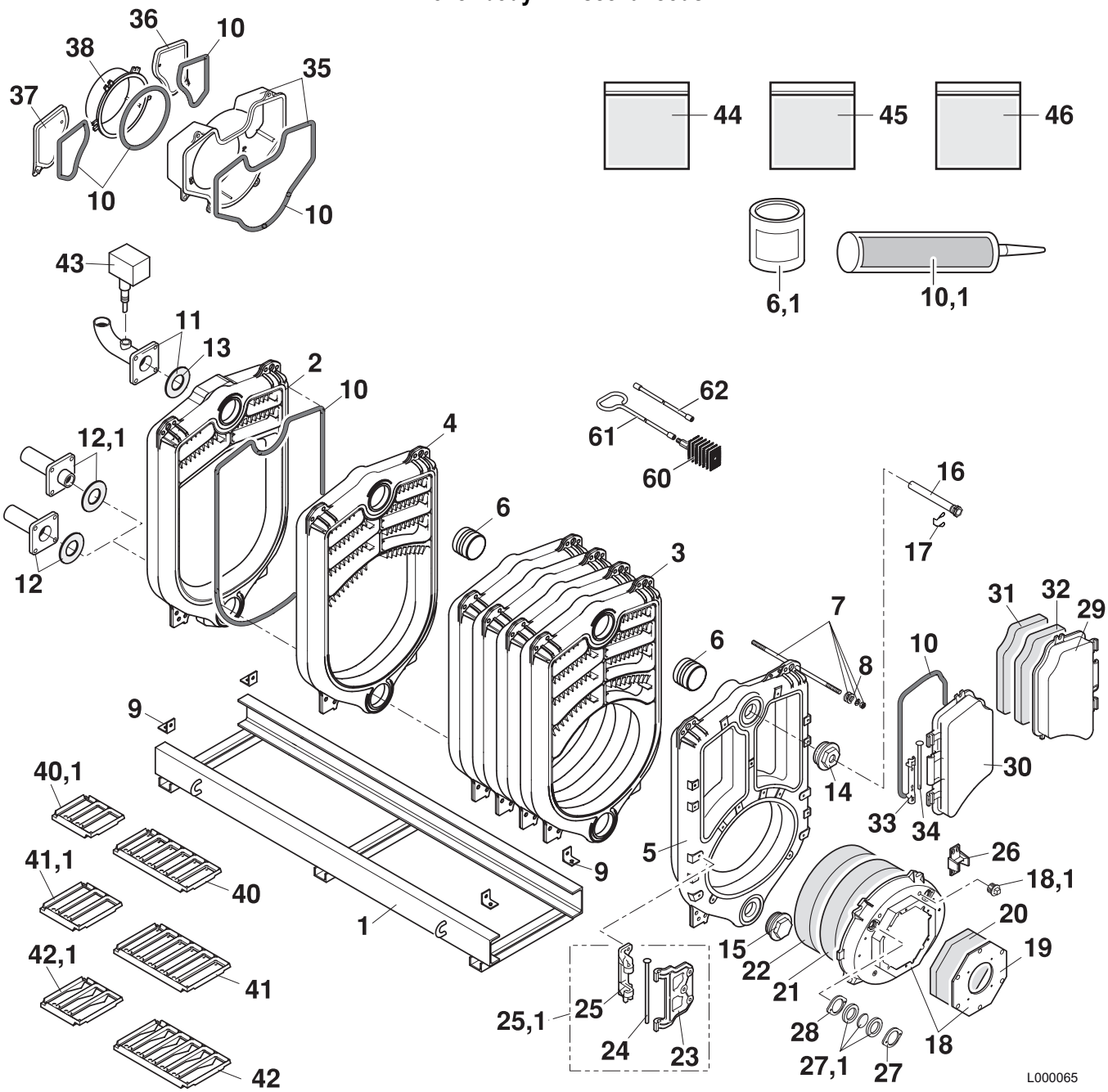
Refer to the instructions supplied with the burner.

8 Spare parts - NXR4i

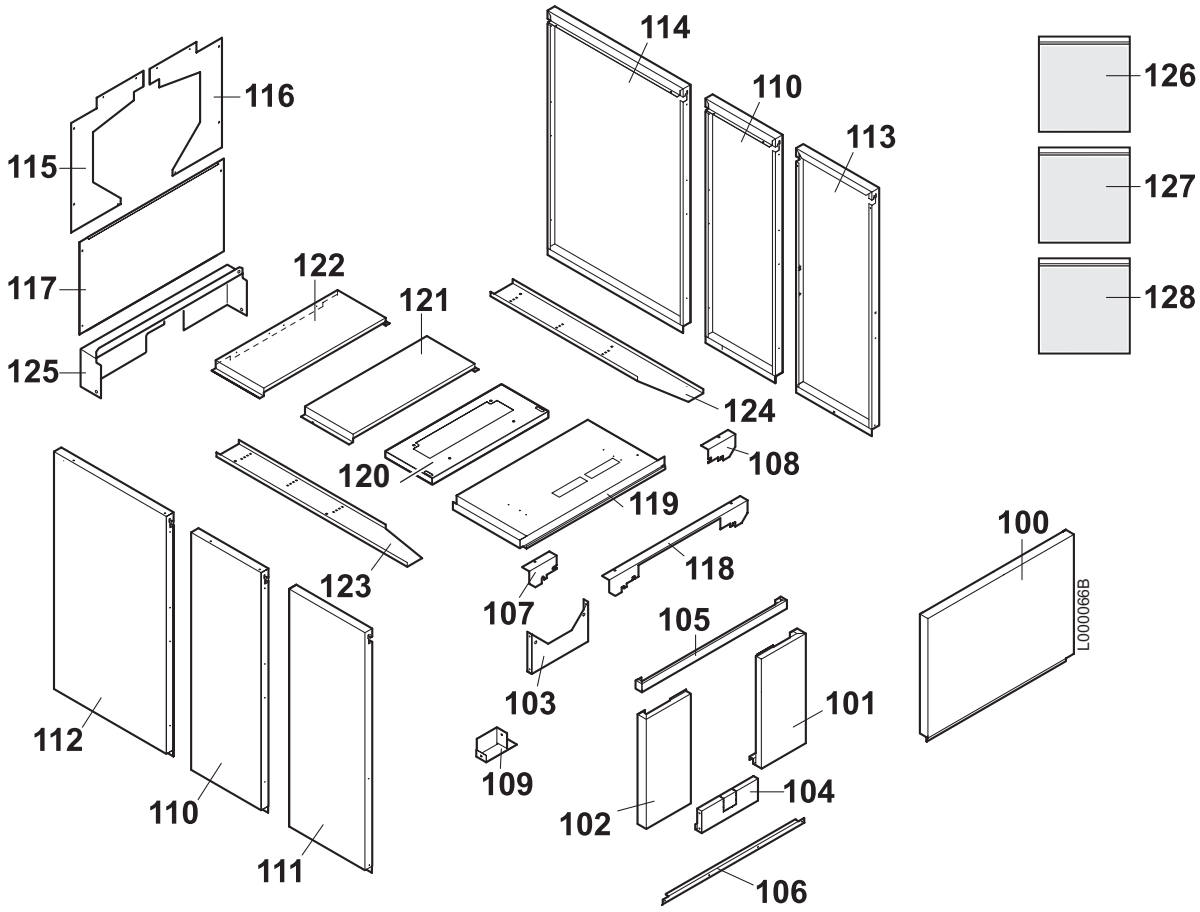
To order a spare part, quote the reference number next to the part required.

300025088-002-A

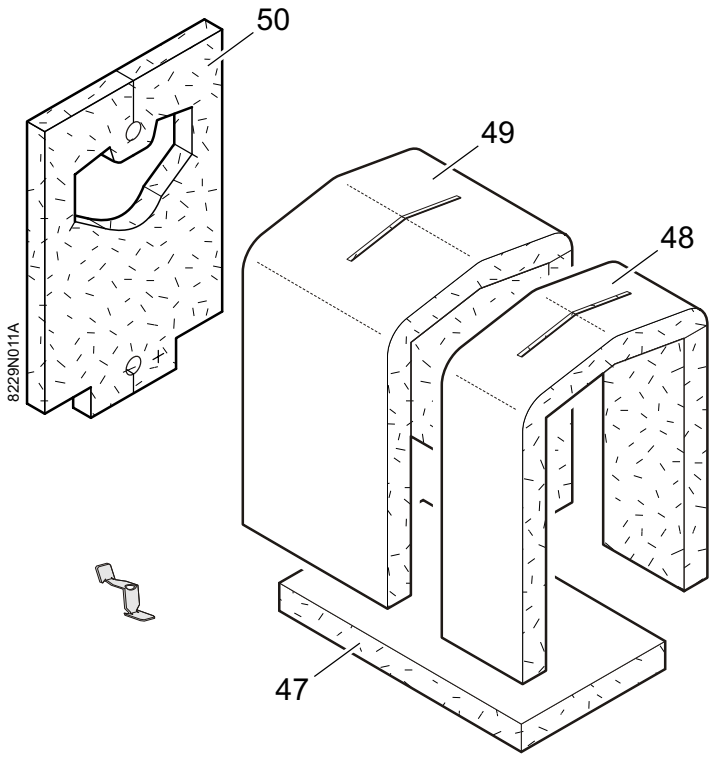
Boiler body + Miscellaneous



Casing



Insulating material for body



Control panels

Refer to the Spare Parts list in the panel instructions.

KSF-ISR control panel

KSF-CE control panel

Markers	Code no.	Description
		Boiler body + Accessories
		Base frame
1	300010442	Complete frame 8 sections
1	300010443	Complete frame 9-10 sections
1	300010444	Complete frame 11-12 sections
1	300010445	Complete frame 13-14 sections
2	8229-8940	Complete rear section
3	8229-0029	Normal intermediate section
4	8229-0030	Special intermediate section
5	8229-8941	Complete front section
6	8005-0200	Nipple
6.1	9430-5027	Nipple greasing product
7	8229-8919	Assembly rod 425 mm
7	8229-8920	Assembly rod 620 mm
7	8229-8921	Assembly rod 784 mm
8	9754-0120	Spring
9	9752-5232	Mounting square
10	9508-6032	Glass fibre cord ø 10 mm (metre)
10.1	9428-5095	Tube of silicon mastic
11	8229-8923	Water flow pipe + gasket, 7 to 10 sections
11	8229-8918	Water flow pipe + gasket, 11 to 14 sections
12	8104-8965	Return collector + seal, 8 to 10 sections
12.1	8229-8922	Return collector + seal, 11 to 14 sections
13	9501-4135	Gasket 162x120x4
14	8202-0028	2" 1/2 plug with 1/2" opening
15	8013-0028	Solid plug 2" 1/2
16	8500-0027	Sensor tube
17	9758-1286	Spring for sensor tube
18	8229-8911	Complete combustion chamber door, no opening
18	8229-8943	Complete 10 mm combustion chamber door with opening on request
18.1	9495-0050	Plug 1/4"
19	8229-0532	Plate for combustion chamber door, no opening
19	8229-0546	Plate for combustion chamber door with opening ø 135
19	8339-0508	Plate for combustion chamber door with opening ø 175
19	8229-0531	Plate for combustion chamber door with opening ø 190
19	8229-0533	Plate for combustion chamber door with opening ø 240
19	8339-0509	Plate for combustion chamber door with opening ø 250
19	8229-0534	Plate for combustion chamber door with opening ø 290
19	8229-0548	Plate for combustion chamber door with opening on request
20	9755-0258	Height converter, insulation

Markers	Code no.	Description
21	9755-0259	Furnace door guard
22	9755-0260	Furnace door insulation
23	8229-0020	Added hinge
24	9756-0213	Hinge pin for combustion chamber door
25	8229-0205	Hinge for combustion chamber door
25.1	8229-8944	Hinge unit
26	8229-0025	Ramp
27	9757-0027	Inspection flange
27.1	8015-7700	Flame inspection window + gaskets
28	9501-0080	Flame inspection window gasket
29	8229-8905	Complete sweeping door, right
30	8229-8906	Complete sweeping door, left
31	9755-0256	Insulation, sweeping door
32	9755-0257	Inner protection, sweeping door
33	8229-0202	Hinge for sweeping door
34	9756-0214	Hinge pin for sweeping door
35	8229-8907	Complete flue gas box
36	8229-8908	Complete right-hand cleaning trap
37	8229-8909	Complete left-hand cleaning trap
38	8229-8916	Flue gas nozzle Ø 250 - 8 to 10 sections
38	8229-8917	Flue gas nozzle Ø 250 - 11 to 14 sections
40	8229-0010	Upper baffle plate, width 190 mm
40.1	8229-0022	Additional upper baffle plate, width 190 mm
41	8229-0011	Upper baffle plate, width 240 mm
41.1	8229-0023	Additional upper baffle plate, width 240 mm
42	8229-0012	Lower baffle plate
42.1	8229-0024	Additional lower baffle plate
43		**Flow switch (Export)**
43	8802-4711	Flow controller NXR4-8
43	8802-4713	Flow controller NXR4-9
43	8802-4715	Flow controller NXR4-10
43	8802-4726	Flow controller NXR4-11
43	8802-4728	Flow controller NXR4-12
43	8802-4729	Flow controller NXR4-13 - 14
44	8229-8936	Screws and accessories bag
45	8229-8937	Variable screws and accessories bag
46	8229-5500	Body screws packet
		Insulating material for body
47	8229-4010	Lower insulation, boiler body - 8 sections
47	8229-4016	Lower insulation, boiler body - 9 and 10 sections
47	8229-4034	Lower insulation, boiler body - 11 and 12 sections
47	8229-4036	Lower insulation, boiler body - 13 and 14 sections
48	8229-4004	Front boiler body insulation, width 500 mm

Markers	Code no.	Description
49	8229-4015	Boiler body insulation, width 520 mm
49	8229-4018	Insulating material for body - Length 600 mm
49	8229-4009	Insulating material for body - Length 800 mm
49	8229-4012	Insulating material for body - Length 900 mm
50	8229-4005	Rear insulation
		Miscellaneous
60	9750-5025	Brush
61	9750-5060	1300 mm brush rod
62	9750-5048	Extension for brush rod 650 mm
		Casing
100	200019288	Complete upper front panel
101	8229-1001	Complete lower front panel, right
102	8229-1003	Complete lower front panel, left
103	8229-1004	Panel for furnace door
104	8229-1005	Sludge removal cap
105	8229-8834	Complete front casing support
106	8229-0537	Lower front crosspiece
107	8229-8807	Upper casing support, left
108	8229-8808	Upper casing support, right
109	8229-8010	Lower casing support
110	200007889	Side panel, left or right, width 480 mm
111	200007422	Complete front side panel, left
112	200007896	Complete side panel, left, width 770 mm
112	200007894	Complete side panel, left, width 610 mm
112	200007898	Complete side panel, left, width 930 mm
113	200007421	Complete front side panel, right
114	200007893	Complete side panel, right, width 610 mm
114	200007895	Complete side panel, right, width 770 mm
114	200007897	Complete side panel, right, width 930 mm
115	8229-8835	Complete upper rear panel, left
116	8229-8836	Complete upper rear panel, right
117	8229-8012	Lower back panel
118	8229-8837	Complete upper cross-bar
119	8229-8809	Complete front cover
120	200019564	Painted control panel base
121	8229-0515	Complete intermediate cover
122	8229-0518	Complete rear cover, width 170 mm
122	8229-0511	Complete rear cover, width 330 mm
122	8229-0514	Complete rear cover, width 490 mm
123	8229-8819	Complete cable way, left, NXR4-8
123	8229-8820	Complete cable way, left, NXR4-9
123	8229-8821	Complete cable way, left, NXR4-10
123	8229-8822	Complete cable way, left, NXR4-11

Markers	Code no.	Description
123	8229-8823	Complete cable way, left, NXR4-12
123	8229-8824	Complete cable way, left, NXR4-13
123	8229-8825	Complete cable way, left, NXR4-14
124	8229-8827	Complete cable way, right, NXR4-8
124	8229-8828	Complete cable way, right, NXR4-9
124	8229-8829	Complete cable way, right, NXR4-10
124	8229-8830	Complete cable way, right, NXR4-11
124	8229-8831	Complete cable way, right, NXR4-12
124	8229-8832	Complete cable way, right, NXR4-13
124	8229-8833	Complete cable way, right, NXR4-14
125	8229-5501	Additional lower rear panel
126	8229-8933	Screw bag, common parts
127	8229-8934	Screw bag, variable parts CS11
128	8229-8935	Screw bag, variable parts CS13

Warranty

You have just purchased one of our appliances and we thank you for the trust you have placed in our products. Please note that your appliance will provide good service for a longer period of time if it is regularly checked and maintained. Your fitter and our customer support network are at your disposal at all times.

■ Warranty terms

Starting from the purchase date shown on the original fitter's invoice, your appliance has a contractual guarantee against any manufacturing defect.

The length of the guarantee is mentioned in the price catalogue.

The manufacturer is not liable for any improper use of the appliance or failure to maintain or install the unit correctly (the user shall take care to ensure that the system is installed by a qualified engineer). In particular, the manufacturer shall not be held responsible for any damage, loss or injury caused by installations which do not comply with the following:

- applicable local laws and regulations
- specific requirements relating to the installation, such as national and/or local regulations
- the manufacturer's instructions, in particular those relating to the regular maintenance of the unit
- the rules of the profession

The warranty is limited to the exchange or repair of such parts as have been recognised to be faulty by our technical department and does not cover labour, travel and carriage costs. The warranty shall not apply to the replacement or repair of parts damaged by normal wear and tear, negligence, repairs by unqualified parties, faulty or insufficient monitoring and maintenance, faulty power supply or the use of unsuitable fuel. Sub-assemblies such as motors, pumps, electric valves etc. are guaranteed only if they have never been dismantled.

Commercial sales technical & service enquiries

Tel:	0845 070 1055
Fax:	0845 070 1059
Sales hotline:	0845 070 1056
Technical helpline:	0845 070 1057
Service hotline:	0845 070 1058
e-mail:	potterton.commercial@baxigroup.com
web:	www.pottertoncommercial.co.uk

Spares

Potterton Commercial spares are available nationwide through the interpart network of approved stockists. Alternatively please contact:-

Interpart
Brooks House
Coventry Road
Warwick CV34 4LL

Tel: 0844 871 1540

Applications & Installations

Our experienced technical support team are available to offer advice on any aspect of heating system design and boiler installation.

Please contact: 0845 070 1057

Commercial service offices

Our service organisation covers the whole of the UK to look after your needs for all Potterton Commercial products.

Our service office offers a wide range of specialised services including:

- Burner commissioning for all fuels
- Boiler service contracts
- Breakdown and repair services
- Burner and boiler replacement
- Oil/gas conversions
- Water treatment and descaling
- Packaged units

All descriptions and illustrations contained within this leaflet have been carefully prepared, but we reserve the right to make changes and improvements in our products which may affect the accuracy of the information in this leaflet.

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